# Louisville Metro Air Pollution Control District 850 Barret Ave., Louisville, Kentucky 40204 26 April 2010

# **Title V Statement of Basis**

| Company: Texas Gas Transmission, LLC  |  |   |                         |  |  |  |
|---|--|---|-------------------------|--|--|--|
| Plant Location: 10327 Gaslight Way, Louisville, Kentucky 40299-2587                               |  |   |                         |  |  |  |
| Date Application Received: 7-22-2005 Date of Draft Permit: 05 Feb 2010 Date of Proposed Permit: 1 |  |   |                         |  |  |  |
| District Engineer: Bob V  | Vesely   | Permit No: 92-97-TV   | (R2)                    |  |  |  |
| <b>Plant ID:</b> 0223   | <b>SIC Code:</b> 4922  | <b>NAICS</b> : 48621  | <b>AFS:</b> 00223       |  |  |  |
| Introduction:   |  |   |                         |  |  |  |
| Regulations Part 70, and identify and consolidate e   | This permit will be issued pursuant to: (1) Regulation 2.16, (2) Title 40 of the Code of Federal Regulations Part 70, and (3) Title V of the Clean Air Act Amendments of 1990. Its purpose is to identify and consolidate existing District and Federal air requirements and to provide methods of determining continued compliance with these requirements. |   |                         |  |  |  |
| dioxide (NO <sub>2</sub> ), carbon mo   | onoxide (CO), 1 hr an  | area for lead (Pb), sulfur did 8 hr ozone ( $O_3$ ), and partical area for particulate matter 1 | culate matter less than |  |  |  |
| Application Type/Permi  | t Activity:  |   |                         |  |  |  |
| [ ] Initial Issuance [ ] Permit Revision  |  |   |                         |  |  |  |
| Compliance Summary:   |  |   |                         |  |  |  |
| [X] Compliance certifica [ ] Source is out of com   | _  | Compliance schedule incl<br>Cource is operating in con  |                         |  |  |  |

#### I. Source Information

- 1. **Product Description:** Natural gas transmission
- 2. Process Description: The Texas Gas Transmission, LLC, Jeffersontown, KY transmission station consists of nine (9) natural gas fueled, 2-stroke, compressor RICEs and one (1) natural gas fueled compressor turbine that are used to transmit natural gas through the pipeline. One (1) natural gas fueled, 4-stroke, RICE powered standby generator, four (4) storage tanks and two (2) parts washers are also emission sources located at the facility.
- **3. Site Determination:** There are no other facilities that are contiguous or adjacent and under common control.

#### 4. Emission Unit Summary:

| <b>Emission Unit</b> | Equipment Description   |
|----------------------|---|
| U1                   | Six (6) compressor engines, Cooper-Bessemer natural gas fueled, 2-stroke, 1,500 bhp, RICE, model GMW-6TFC (after modification)  |
| U2                   | Three (3) compressor engines, Cooper-Bessemer natural gas fueled, 2-stroke, 1,500 bhp, RICE, model GMWA-6C (after modification)   |
| U16                  | Four (4) storage tanks: one 4,000 gallon ethylene glycol storage split tank, one-half pure ethylene glycol and one-half mixed ethylene glycol; one 310 gallon mixed ethylene glycol overflow tank, for RICE surge tanks; one 955 gallon mixed ethylene glycol maintenance storage tank; and one 4,400 gallon pipeline distillate storage tank |
| U20                  | One (1) standby generator engine, Waukesha 800 bhp, natural gas fueled, 4-stroke, RICE, model L36GL (VGF).  |
| U21                  | One, (1) compressor turbine engine, Solar brand, 14,491 bhp, model Mars 100-T-15000S natural gas fired only   |
| U25                  | Two (2) cold solvent parts cleaners, 15 and 225 gallon capacities   |

**5. Fugitive Sources:** There are minor fugitive emissions of VOC from the equipment leaks in the natural gas piping. However, there are no regulatory limits on these emissions, nor is there any regulatory basis to consider them in the Title V permit. There are fugitive NO<sub>x</sub> emissions from the combustion of natural gas.

#### **6.** Permit Revisions:

| Revision<br>No. | Issue Date | Public<br>Notice Date | Туре                | Attachment<br>No./Page No. | Description   |
|-----------------|------------|-----------------------|---------------------|----------------------------|---|
| N/A             | 1/23/2001  | 3/12/2000             | Initial             | Entire Permit              | Initial Permit<br>Issuance  |
| R1              | 1/23/2001  | 3/12/2000             | Adminis-<br>trative | Cover page                 | Corrected expiration date   |
| R2              | 04/26/2010 | 2/05/2010             | Renewal             | Entire permit              | 5 year renewal,<br>Amended NO <sub>x</sub><br>RACT Plan,<br>equipment<br>modifications,<br>new RO |
|                 |            |                       | Adminis-<br>trative | Pages: 18                  | Insignificant<br>activities<br>paragraphs   |
|                 |            |                       |                     | Pages: 9, 17,<br>18        | Revised pollutant columns   |

# 7. Emission Summary:

| Pollutant         | District Calculated<br>Actual Emissions (tpy)<br>2008 Data | Pollutant that triggered<br>TV Major Source Status<br>(based on PTE) |
|-------------------|--|--|
| СО                | 148.82   | Yes  |
| NO <sub>x</sub>   | 76.98  | Yes  |
| $SO_2$            | 0.78   | No   |
| PM                | 10.03  | No   |
| $PM_{10}$         | 10.03  | No   |
| PM <sub>2.5</sub> | 10.03  | No   |
| voc               | 27.02  | No   |
| Single HAP        | 10.05  | Yes  |
| Total HAPs        | 10.55  | Yes  |

8. Applicable Requirements:

| [X] PSD | [X] 40 CFR 60 | [X] SIP             | [X] 40 CFR 60 |
|---------|---------------|---------------------|---------------|
| [X] NSR | [ ] 40 CFR 61 | [X] District-Origin | Other         |

9. Future MACT Requirements: N/A

#### 10. Referenced Federal Regulations in Permit:

| 40 CFR Part 60 Subpart A    | General Provisions                          |
|-----------------------------|---|
| 40 CFR Part 60 Subpart GG   | Standards of Performance for Stationary Gas |
| -                           | Turbines                                    |
| 40 CFR Part 63 Subpart A    | General Provisions                          |
| 40 CFR Part 63 Subpart YYYY | National Emission Standards for Hazardous   |
|                             | Air Pollutants for Stationary Combustion    |
|                             | Turbines                                    |
| 40 CFR Part 63 Subpart ZZZZ | National Emission Standards for Hazardous   |
|                             | Air Pollutants for Stationary Reciprocating |
|                             | Internal Combustion Engines                 |

#### II. Regulatory Analysis

- **1. Acid Rain Requirements:** The source is not subject to the Acid Rain Program.
- 2. Stratospheric Ozone Protection Requirements: Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. This source does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.
- **3. Prevention of Accidental Releases 112(r):** The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.
- **4. 40 CFR Part 64 Applicability Determination:** Texas Gas Transmission, LLC is not subject to 40 CFR Part 64 *Compliance Assurance Monitoring for Major Stationary Sources*, since each emission point has no control device, other than permanently built-in engine designs or modifications, for NO<sub>x</sub> or CO emissions for which the company is a major source and each emission point is not a major source for NO<sub>x</sub> and CO emissions.

# 5. Basis of Regulation Applicability

#### a. Plant-wide

Texas Gas Transmission, LLC is a major source for NO<sub>x</sub> emissions. Regulation 2.16 - *Title V Operating Permits* establishes requirements for major sources.

The source is subject to the  $NO_x$  emission limits, based on the amount of  $NO_x$  emissions in the exhaust gases from the various engines at the facility as listed below.

| Engines  | Limit  | Product         |
|--|--|-----------------|
| #1, #2, #3, #4, #5, #6, #7, #8, and #9 stationary RICE | 3.0 g/bhp-hr                                 | NO <sub>x</sub> |
| Compressor turbine T-2                                 | 37.5 ppmvd                                   | NO <sub>x</sub> |
| Standby generator RICE                                 | 2.6 g/bhp-hr, 1,500 hr/12 consecutive months | NO <sub>x</sub> |

Regulations 5.01, 5.21, and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. An EA Technical Evaluation for Category 1 TACs was performed by District on 10/6/08, for Texas Gas Transmission, LLC and the source meets the de minimis levels for Category 1 TACs.

Regulation 5.11 provides for the control of toxic air pollutant emissions from existing processes and process equipment.

The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels, whether specifically established by modeling or derived from default de minimis levels provided by the District. The owner or operator shall not increase the TAC content in a raw material, or substitute any raw materials with additional TACs, for those identified in the initial permit application for this process or equipment, if such increase or substitution would result in an increase in the emission of any TAC above the de minimis levels, without prior notification to, and approval by, the District. (Regulation 5.01, section 3)

The TAC emissions from the combustion of natural gas are considered to be "de minimis emissions" by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas. (Regulation 5.01, section 1.6.7)

### b. Emission Unit U1 – Compressor engines #1, #2, #3, #4, #5 and #6

### i. **Equipment:**

| P/PE  | Capacity       | Installation<br>Date  | Applicable<br>Regulation     | Basis for Applicability   |
|---|----------------|---|------------------------------|---|
| Six (6) compressor<br>engines, natural<br>gas fueled, 2-<br>stroke, RICE,<br>modified with<br>Lean Emission | 1,500 bhp each | #1, #2, #3, & #4:<br>Installed 1950<br>#5 & #6:<br>Installed 1953 | 5.01                         | Regulation 5.01 establishes the requirements for Environmental Acceptability for TACs. Group 1 company with Category 1 TACs, which could exceed the de minimis values.  Stationary engines emitting large amounts of NO <sub>x</sub> are subject to |
| Combustion technology equipment   |                |   | 6.42                         | Regulation 6.42 for major nitrogen oxides emitting facilities.  |
|   |                |   | 40 CFR 63<br>Subpart<br>ZZZZ | Subpart ZZZZ establishes limits<br>for HAPs emitted from stationary<br>RICE engines located at major<br>sources of HAP emissions.   |

# ii. Standards/Operating Limits

#### $NO_{x}$

- (a) Regulation 6.42 establishes the RACT requirements for  $NO_x$  emitting facilities.
- (b) The emissions for the pollutant NO<sub>x</sub>, from each engine, shall not exceed three grams per brake horsepower-hour (3.0 g/bhp-hr), based on a thirty (30) day rolling average period.
- (c) All requirements of NO<sub>x</sub> RACT Plan Amendment #2 shall apply.

#### 2) **HAP**

40 CFR 63 Subpart ZZZZ does not require limits of HAPs, because the engines are existing spark ignition, 2-stroke, lean burn, stationary RICEs on which reconstruction commenced prior to December 12, 2002, and therefore do not meet the requirements of the subpart.

#### iii. Monitoring

## $NO_x$

The engine parameters listed in Element 7.A of NO<sub>x</sub> RACT Plan - Amendment #2 shall be continuously monitored on a real time basis to ensure proper maintenance and functioning at industry acceptable conditions.

#### iv. Record Keeping

#### $NO_x$

Record keeping requirements are contained in the NO<sub>x</sub> RACT Plan – Amendment #2.

#### v. **Reporting**

Semi-annual compliance reports that include the information listed below shall be submitted bi-annually to show compliance with limits of permit. Compliance reports shall clearly identify any deviations from any permit requirement. Compliance reports shall be postmarked within 60 days following the end of each reporting period. Compliance reports shall be signed by a responsible official and shall include a certification statement per Regulation 2.16, section 3.5.11.

#### $NO_X$

- 1) Emission unit ID number and emission point ID number.
- 2) Beginning and end date of the reporting period.
- 3) Identification of all periods of exceedances of the NO<sub>x</sub> standard for the entire plant including the quantity of excess emissions.
- 4) Description of corrective action taken for the exceedance.

## c. Emission Unit U2 – Compressor engines #7, #8 and #9

#### i. **Equipment:**

| P/PE  | Capacity       | Installation<br>Date                                  | Applicable<br>Regulation     | Basis for Applicability  |
|---|----------------|---|------------------------------|--|
| Three (3)<br>compressor<br>engines, natural<br>gas fueled, 2-<br>stroke, RICE,<br>modified with | 1,500 bhp each | #7:<br>Installed 1956<br>#8:<br>Installed 1962<br>#9: | 5.01                         | Regulation 5.01 establishes the requirements for Environmental Acceptability for TACs. Group 1 company with Category 1 TACs, which could exceed the de minimis values. |
| Lean Emission Combustion technology equipment   |                | Installed 1963  | 6.42                         | Stationary engines emitting large amounts of NO <sub>x</sub> are subject to Regulation 6.42 for major nitrogen oxides emitting facilities.                             |
|   |                |   | 40 CFR 63<br>Subpart<br>ZZZZ | Subpart ZZZZ establishes limits<br>for HAPs emitted from stationary<br>RICE engines located at major<br>sources of HAP emissions.                                      |

#### ii. Standards/Operating Limits

### 1) $NO_x$

- (a) Regulation 6.42 establishes the RACT requirements for NO<sub>x</sub> emitting facilities.
- (b) The emissions for the pollutant NO<sub>x</sub>, from each engine, shall not exceed three grams per brake horsepower-hour (3.0 g/bhp-hr), based on a thirty (30) day rolling average period.
- (c) All requirements of NO<sub>x</sub> RACT Plan Amendment #2 shall apply.

#### 2) **HAP**

40 CFR 63 Subpart ZZZZ does not require limits of HAPs, because the engines are existing spark ignition, 2-stroke, lean burn, stationary RICEs on which reconstruction commenced prior to December 12, 2002, and therefore do not meet the requirements of the subpart.

#### iii. Monitoring

#### $NO_x$

The engine parameters listed in Element 7.A of  $NO_x$  RACT Plan - Amendment #2 shall be continuously monitored on a real time basis to ensure proper maintenance and functioning at industry acceptable conditions.

#### iv. Record Keeping

#### $NO_x$

Record keeping requirements are contained in the NO<sub>x</sub> RACT Plan – Amendment #2.

### v. **Reporting**

Semi-annual compliance reports that include the information listed below shall be submitted bi-annually to show compliance with limits of permit. Compliance reports shall clearly identify any deviations from any permit requirement. Compliance reports shall be postmarked within 60 days following the end of each reporting period. Compliance reports shall be signed by a responsible official and shall include a certification statement per Regulation 2.16, section 3.5.11.

#### $NO_{X}$

- 1) Emission unit ID number and emission point ID number.
- 2) Beginning and end date of the reporting period.
- 3) Identification of all periods of exceedances of the NO<sub>x</sub> standard for the entire plant including the quantity of excess emissions.
- 4) Description of corrective action taken for the exceedance

#### d. Emission Unit U16 – Four (4) storage tanks

#### i. **Equipment:**

| P/PE   | Capacity   | Installation<br>Date          | VOC<br>Potential To<br>Emit<br>(tn/yr) | Applicable<br>Regulation | Basis for Applicability  |
|--|--|-------------------------------|--|--------------------------|--|
| Four (4)<br>ethylene glycol<br>storage tanks | One (1) 4,000 gal<br>ethylene glycol<br>split storage tank,<br>half pure and half<br>mixed<br>One (1) 310 gal<br>mixed ethylene<br>glycol overflow<br>for RICE surge | Installed 1999 Installed 1999 | 0.00004                                | 5.01                     | Regulation 5.01 establishes the requirements for Environmental Acceptability for TACs. Group 1 company with Category 1 TACs, which could exceed the de minimis values. |
|  | tanks One (1) 995 gal mixed ethylene glycol maintenance storage tank   | Installed 2000                | 0.000005                               | 7.12                     | Storage vessels for volatile organic compounds constructed or modified after 4/19/1972, with a capacity greater than 250 gallons are subject to Regulation 7.12.       |

| P/PE | Capacity                                   | Installation<br>Date | VOC<br>Potential To<br>Emit<br>(tn/yr) | Applicable<br>Regulation | Basis for Applicability |
|------|--|----------------------|--|--------------------------|-------------------------|
|      | One (1) 4,400 gal pipeline distillate tank | Installed 1996       | 0.0282                                 |                          |                         |

### ii. Standards/Operating Limits

#### VOC

Regulation 7.12 requires that no liquids with an as stored vapor pressure greater than or equal to one and one-half psia (1.5 psia) shall be stored in storage vessels with a capacity greater than 250 gallons, unless the vessel is equipped with a submerged fill pipe.

### iii. Monitoring

#### **VOC**

See section d.iv.

# iv. Record Keeping

#### VOC

- 1) To demonstrate compliance, the owner or operator shall maintain records of the materials stored in each vessel and their respective as stored vapor pressures.
- 2) Since the emissions from the source's storage tanks are very minor (combined total of less than one ton per year), the owner or operator may elect to report the Potential To Emit quantities in the U16 Equipment table, as annual emissions, in lieu of recording annual throughput and calculating emissions.

#### v. **Reporting**

Semi-annual compliance reports that include the information listed below shall be submitted bi-annually to show compliance with limits of permit. Compliance reports shall clearly identify any deviations from any permit requirement. Compliance reports shall be postmarked within 60 days following the end of each reporting period. Compliance reports shall be signed by a responsible official and shall include a certification statement per Regulation 2.16, section 3.5.11.

#### **VOC**

- 1) Emission unit ID number and emission point ID number.
- 2) Beginning and end date of the reporting period.
- 3) Identification of all materials stored in the vessels during the report period to show compliance with the as stored vapor pressure of less than 1.5 psia.
- 4) Description of corrective action taken for the exceedance.

## e. Emission Unit U20 – Standby generator

#### i. **Equipment:**

| P/PE   | Capacity | Installation<br>Date        | Applicable<br>Regulation     | Basis for Applicability  |
|--|----------|-----------------------------|------------------------------|--|
| One (1) standby generator with natural gas fueled, 4-stroke, RICE, equipped with NO <sub>x</sub> emission limiting | 800 bhp  | Installed:<br>November 1997 | 5.01                         | Regulation 5.01 establishes the requirements for Environmental Acceptability for TACs. Group 1 company with Category 1 TACs, which could exceed the de minimis values. |
| equipment  |          |                             | 6.42                         | Stationary engines emitting large amounts of NO <sub>x</sub> are subject to Regulation 6.42 for major nitrogen oxides emitting facilities.                             |
|  |          |                             | 40 CFR 63<br>Subpart<br>ZZZZ | Subpart ZZZZ establishes limits<br>for HAPs emitted from stationary<br>RICE engines located at major<br>sources of HAP emissions.                                      |

#### ii. Standards/Operating Limits

#### $NO_{\mathbf{x}}$

- (a) Regulation 6.42 establishes the RACT requirements for NO<sub>x</sub> emitting facilities.
- (b) The standby generator shall be limited to one thousand five hundred (1,500) hours of operation in a twelve (12) consecutive month period.
- (c) All requirements of NO<sub>x</sub> RACT Plan Amendment #2 shall apply.

### 2) **HAP**

40 CFR 63 Subpart ZZZZ does not require limits of HAPs, because the engine is an existing spark ignition, 2-stroke, lean burn, stationary RICE on which reconstruction commenced prior to December 12, 2002, and therefore does not meet the requirements of the subpart.

#### iii. Monitoring

#### $NO_x$

The engine parameters listed in Element 7.C of NO<sub>x</sub> RACT Plan - Amendment #2 shall be continuously monitored on a real time basis to ensure proper maintenance and functioning to obtain the manufacturer's guaranteed emission rate.

#### iv. Record Keeping

#### $NO_x$

The owner or operator shall maintain records of the unit's hours of operation, per Section 7.C of  $NO_x$  RACT Plan – Amendment #2, to ensure compliance with the 1,500 hours of operation in a twelve (12) consecutive month period.

## v. **Reporting**

Semi-annual compliance reports that include the information listed below shall be submitted bi-annually to show compliance with limits of permit. Compliance reports shall clearly identify any deviations from any permit requirement. Compliance reports shall be postmarked within 60 days following the end of each reporting period. Compliance reports shall be signed by a responsible official and shall include a certification statement per Regulation 2.16, section 3.5.11.

#### $NO_{X}$

- 1) Emission unit ID number and emission point ID number.
- 2) Beginning and end date of the reporting period.
- 3) Hours of operation for each month of the unit during the report period.
- 4) Total hours of the unit's operation for the twelve (12) consecutive month periods in the reports time period.
- 5) Identification of all periods of exceedances of the NO<sub>x</sub> standard for the entire plant including the quantity of excess emissions.

6) Description of corrective action taken for the exceedance.

# f. Emission Unit U21 – Turbine compressor T-2

### i. **Equipment:**

| P/PE  | Capacity      | Installation<br>Date    | Applicable<br>Regulation  | Basis for Applicability  |
|---|---------------|-------------------------|---------------------------|--|
| One (1) turbine compressor engines, natural gas fueled, | 14,491<br>bhp | Installed:<br>July 2005 | 5.01                      | Regulation 5.01 establishes the requirements for Environmental Acceptability for TACs. Group 1 company with Category 1 TACs, which could exceed the de minimis values. |
| equipped with SoLoNOx mode combustion                   |               |                         | 6.42                      | Stationary engines emitting large amounts of NO <sub>x</sub> are subject to Regulation 6.42 for major nitrogen oxides emitting facilities.                             |
| technology  |               |                         | 40 CFR 60<br>Subpart GG   | Subpart GG establishes limits for HAPs emitted from new stationary combustion turbines.  |
|   |               |                         | 40 CFR 63<br>Subpart YYYY | Subpart YYYY establishes a Stay of Standards for natural gas fired combustion turbines, but an Initial Notification is required.                                       |

## ii. Standards/Operating Limits

## $NO_{\mathbf{x}}$

- (a) Regulation 6.42 establishes the RACT requirements for NO<sub>x</sub> emitting facilities.
- (b) The emissions for the pollutant NO<sub>x</sub>, from the compressor turbine, shall not exceed thirty-seven and one half parts per million by volume on a dry gas basis (37.5 ppmvd) corrected to 15% O<sub>2</sub>, based on a one hour average period.
- (c) All requirements of NO<sub>x</sub> RACT Plan Amendment #2 shall apply.

## 2) **SO<sub>2</sub>**

40 CFR 60.333 limits the amount of sulfur in any fuel combusted in a stationary turbine to not exceed eight-tenths of a percent (0.8 %) by weight.

#### 3) **HAP**

40 CFR 63 Subpart YYYY issues a stay of standards for for gas-fired turbines as defined by the subpart, requiring

only an initial notification and need not comply with any other parts of the subpart until EPA takes final action to require compliance.

#### iii. Monitoring

#### $NO_x$

See section f.iv.

# iv. Record Keeping

#### $NO_x$

- 1) The beginning and end times and dates of each period of time that compressor turbine T-2 is not operating in the SoLoNOx mode.
- 2) Beginning and ending times and dates of each startup and shutdown time period.
- 3) Stack tests shall be performed each year.

## v. **Reporting**

Semi-annual compliance reports that include the information listed below shall be submitted bi-annually to show compliance with limits of permit. Compliance reports shall clearly identify any deviations from any permit requirement. Compliance reports shall be postmarked within 60 days following the end of each reporting period. Compliance reports shall be signed by a responsible official and shall include a certification statement per Regulation 2.16, section 3.5.11.

#### $NO_X$

- 1) Emission unit ID number and emission point ID number.
- 2) Beginning and end dates of the reporting period.
- 3) Identification of all periods of operation when compressor turbine T-2 is not in the SoLoNO<sub>x</sub> mode.

#### vi. **Testing**

### $NO_{x}$

Annual emissions tests as stipulated in NO<sub>x</sub> RACT Plan – Amendment #2, are required to ensure compliance with the standards.

## 2) **CO**

The Method 10 test for determining concentrations of carbon monoxide (CO) is an applicable test method per 40 CFR 60 Appendix A.

#### g. Emission Unit U25 - Two (2) cold solvent parts cleaner

### i. **Equipment:**

| P/PE                                    | Capacity    | Applicable<br>Regulation | Basis for Applicability  |  |
|---|-------------|--------------------------|--|--|
| One (1) cold<br>solvent parts<br>washer | ent parts   |                          | Cold solvent parts washers are subject to Regulation 6.18, which provides the requirements for the equipment and the operation of the equipment. |  |
| One (1) cold<br>solvent parts<br>washer | 225 gallons | 6.18                     | Cold solvent parts washers are subject to Regulation 6.18, which provides the requirements for the equipment and the operation of the equipment. |  |

#### ii. Standards/Operating Limits

#### **VOC**

Regulation 6.18, section 4.1 and section 4.2 establish the equipment requirements and the operating requirements for cold solvent metal parts cleaners that shall be adhered with to ensure compliance with the permit.

#### iii. Monitoring

#### **VOC**

Regulation 2.16, section 4.1.9.1, establishes monitoring requirements to assure ongoing compliance with the terms and conditions of the permit. Refer to Record Keeping, Section 6.c.iv

#### iv. Record Keeping

#### **VOC**

1) Regulation 6.18, 4.4.2, requires maintaining records that include the following for each purchase of cold solvent for the parts washer.

- (a) Name and address of the solvent supplier.
- (b) Date of purchase.
- (c) Type of solvent.
- (d) Vapor pressure of the solvent measured in mm Hg at 20°C (68°F).
- 2) Regulation 6.18, section 4.4.3, requires all records shall be maintained for five (5) years and made available to District upon request.

## v. **Reporting**

#### VOC

There are no routine reporting requirements for Regulation 6.18.

# **III.** Other Requirements

- **1. Temporary Sources:** The source did not request to operate any temporary facilities.
- **2. Short Term Activities:** The source did not report any short term activities.
- 3. Emissions Trading: N/A
- **4. Alternative Operating Scenarios**: The source did not request any Alternative Operating Scenarios.
- **5. Compliance Status:** Texas Gas Transmission, LLC is required to submit their annual Compliance Certification to the District on or before April 15<sup>th</sup> of each calendar year. As of the effective date of Permit 92-97-TV (R2), there are no compliance schedules in effect or progress reports required.
- **Emission Factors:** The following emission factors shall be used unless more accurate District approved emission factors become available.

| Equipment   | Product             | <b>Emission Factor</b>   | EF Source               |
|---|---------------------|--|-------------------------|
| Nine (9) Cooper-Bessemer,<br>1,500 bhp, 2-stroke, lean burn<br>RICE powered compressors                   | Natural gas<br>fuel | 3.0 g/bhp-hr NO <sub>x</sub> ,<br>based on 30 day<br>rolling average                 | Manufacturer's warranty |
| One (1) Waukesha 800 bhp,<br>4-stroke, low NO <sub>x</sub> equipped,<br>RICE powered standby<br>generator | Natural gas<br>fuel | 2.6 g/bhp-hr NO <sub>x</sub> ,<br>based on 30 day<br>rolling average,<br>1,500 hr/12 | Manufacturer's warranty |

| Equipment   | Product             | <b>Emission Factor</b>   | EF Source               |
|---|---------------------|--|-------------------------|
|   |                     | consecutive month period   |                         |
| One (1) Solar 14,491 bhp, low NO <sub>x</sub> equipped turbine powered compressor | Natural gas<br>fuel | 37.5 ppmvd NO <sub>x</sub> , corrected to 15% O <sub>2</sub> , based on a 1 hr average | Manufacturer's warranty |

Note: Actual NO<sub>x</sub> emissions are verified to be less than the manufactures' guarantee by emissions testing of the nine (9) compressor RICE and the compressor turbine as required by NO<sub>x</sub> RACT Plan - Amendment #2.

# 7. Insignificant Activities

| Equipment  | Quantity | Pollutant<br>Potential<br>To Emit<br>(tn/yr) | Basis for Exemption           |
|--|----------|--|-------------------------------|
| Brazing, soldering or welding  | Various  | PM/PM10<br>0.006                             | Regulation 2.02, sec. 2.3.4   |
| Emergency relief vents   | Various  | Note h                                       | Regulation 2.02, sec. 2.3.10  |
| Lubricate oil storage tank (TK01, 11,750 gal, installed 1950)                          | 1        | VOC<br>0.00002                               | Regulation 2.02, sec. 2.3.9.2 |
| Mixed lubricate oil/water storage tank (TK02, 6,000 gal, installed 1969)               | 1        | VOC<br>0.000015                              | Regulation 2.02, sec. 2.3.9.2 |
| Mixed lubricate oil/water storage tank (TK05, 2,727 gal, installed 1969)               | 1        | VOC<br>0.000005                              | Regulation 2.02, sec. 2.3.9.2 |
| Diesel fuel storage tank (TK06, 300 gal, installed 1974)                               | 1        | VOC<br>0.00009                               | Regulation 2.02, sec. 2.3.9.2 |
| Diesel fuel storage tank (TK07, 300 gal, installed 1974)                               | 1        | VOC<br>0.00009                               | Regulation 2.02, sec. 2.3.9.2 |
| Gasoline storage tank < 250 gal (TK09, 220 gal, installed 1979)                        | 1        | VOC<br>0.1454                                | Regulation 2.02, sec. 2.3.24  |
| Portable pipeline fluid storage tank < 250 gal (TK11, 165 gal, installed date unknown) | 1        | VOC<br>0.0023                                | Regulation 2.02, sec. 2.3.24  |
| Waste lubricate oil storage tank (TK12, 575 gal, installed date unknown)               | 1        | VOC<br>0.000005                              | Regulation 2.02, sec. 2.3.9.2 |

| Equipment  | Quantity | Pollutant<br>Potential<br>To Emit<br>(tn/yr) | Basis for Exemption           |
|--|----------|--|-------------------------------|
| Lubricate oil recovery tank (TK14, 1,615 gal, installed 1953)  | 1        | VOC<br>0.000005                              | Regulation 2.02, sec. 2.3.9.2 |
| Mixed lubricate oil/water storage tank (TK16, 6,000 gal, installed 1998)                                   | 1        | VOC<br>0.000015                              | Regulation 2.02, sec. 2.3.9.2 |
| Mixed lubricate oil/water storage tank < 250 gal, with submerged fill pipe (TK21, 135 gal, installed 1999) | 1        | VOC<br>0.000005                              | Regulation 2.02, sec.2.3.24   |
| Diesel fuel storage tank (TK24, 50 gal, installed 2009)  | 1        | VOC<br>0.000035                              | Regulation 2.02, sec. 2.3.9.2 |
| Combustion sources < 1 mmbtu/hr Heaters for offices, break rooms, warehouse, etc.                          | 20       | CO<br>1.84<br>NO <sub>x</sub><br>2.52        | Regulation 2.02, sec. 2.1.1   |
| Internal combustion engines  | Various  | Note i                                       | Regulation 2.02, sec. 2.2     |

- a) Insignificant Activities identified in District Regulation 2.02, section 2, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16, section 3.5.4.1.4.
- b) Insignificant activities identified in District Regulation 2.02, section 2, shall comply with generally applicable requirements as required by Regulation 2.16, section 4.1.9.4
- c) The District has determined pursuant to Regulation 2.16, section 4.1.9.4 that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed.
- d) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- e) The company shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16, section 4.3.5.3.6.
- f) For the vessels that store materials with a vapor pressure less than 1.5 psia (Ethylene Glycol, diesel fuel, natural gas distillates, etc) or any other tank that stores VOCs or HAPs, the owner or operator shall maintain records of the materials stored in the tanks. The company shall monitor and record the throughput (in gallons) of each product for each tank, and report the annual emissions to the District in accordance with Regulation 1.06.

- g) In lieu of recording annual throughputs, the owner or operator may elect to report the Pollutant Potential To Emit quantity listed in the Insignificant Activities table, as the annual emission for each piece of equipment, since the emissions from the source's Insignificant Activities are very minor in comparison to the plant wide emissions.
- h) Emission from emergency relief valve releases shall be treated as an Upset Condition and notification of the condition and the resulting emissions shall be reported to District as required by Regulation 1.07 and in the annual emissions inventory.
- i) Annual emissions from the Emergency Fire Pump engine and the Auxiliary Air Compressor engine shall be calculated using the annual hours of operation from the annual hours of operations recorded for each engine.